

#121D

S/N 09/560,121PATENTIN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Todd A. Merritt

Examiner: Jung Kim

Serial No.: 09/560,121

Group Art Unit: 2816

Filed: April 28, 2000

Docket: 303.626US1

Title: HIGH OUTPUT HIGH EFFICIENCY LOW VOLTAGE CHARGE PUMP

SUPPLEMENTAL AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111Commissioner for Patents
Washington, D.C. 20231

This Supplemental Amendment in the present continuing prosecution application is in further response to the Office Action mailed on February 19, 2002. This supplemental Amendment is in addition to the response mailed on May 20, 2002. Applicant respectfully requests entry of the Supplemental Amendment Under 37 C.F.R. § 1.111 before examination and consideration of the above-identified application.

IN THE SPECIFICATION/FIGURES

Please make paragraph substitutions indicated in the appendix entitled Clean Version of Amended Specification Paragraphs. The specific changes incorporated in the substitute paragraphs are shown in the following marked-up versions of the original paragraphs:

The paragraph beginning on page 8, and line 1 is amended as follows:

The charge pump circuit 102 further includes a first and a second secondary phase generator 220A and 220B, which receive the first and second phase signals having the high-high crossing point and generates delayed fifth and sixth phase signals similar to the first and second phase signals, having a high-high crossing point. The charge pump circuit 102 further includes first and second pre-boot caps and associated driving circuitry 230A and 230B, which receive the first and second phase signals having high-high crossing points, and third and fourth phase signals having low-low crossing points. The charge pump circuit 102 further includes a first and a second main pump capacitor and associated pre-charge circuitry 240A and 240B, which receive the delayed fifth and sixth phase signals having the high-high crossing points from the first and second secondary phase generators 220A and 220B respectively. In a typical charge cycle, during the first phase, the first main pump capacitor 240A receives the fifth delayed phase signal having high-high crossing point from the first secondary phase generator 220A and outputs a

FAX COPY RECEIVED

OCT 23 2002

TECHNOLOGY CENTER 2800